1971-72 HOLLEY (FORD) 5200 2-BARREL

FORD MOTOR CO.

1971

① Ford Carburetor No.

PINTO APPLICATION	Synchro-mesh	Auto. Trans.
2000cc W/O A/C	D12F-BA, EA	D22F-AA, AB
	D22F-BA, EA	D12F-AA, DA
2000cc W/ A/C	D22F-DA, GA	D12F-CA, FA
		D22F-CA, CB

1972

2000cc (Exc. Calif.)	D22F-AC, BB	D22F-AB, AC
	D22F-AA, BC	D22F-AA, BC
W/ A/C	D22F-DB	D22F-CB
2000cc (Calif. Only) ②		D22F-EA, EB
W/ A/C		D22F-GA

① – Ford Carburetor number prefix and suffix with basic part number (9510) omitted.
② – All Calif. vehicles equipped with NOx System.

CARBURETOR IDENTIFICATION

Carburetor identification number prefix and suffix (example – D12F-BA) is stamped on carburetor body or an attached metal tag. First letter of second line indicates design change which may affect parts replacement. Other digits on second line do not pertain to servicing of carburetor.

DESCRIPTION

This carburetor is a two stage, two venturi type, with the primary venturi being smaller than the secondary. Secondary stage is operated by mechanical linkage. Primary stage includes curb idle, accelerator pump, idle transfer, main metering jet, and power enrichment systems. Secondary stage includes transfer, main metering jet, and power enrichment systems. The single fuel bowl supplies fuel for both stages. A water-heated automatic choke with integral diaphragm type choke plate pull-down is mounted on the carburetor main body.

► CHANGES, CAUTIONS, CORRECTIONS

► *1971 CARBURETOR REVISION NOTE* – Model 5200 carburetors were revised late in 1971. Revisions are carried over into 1972 Models. New design carburetors installed on 1971 models can be identified by the "D22" prefix stamped on the identification tag.

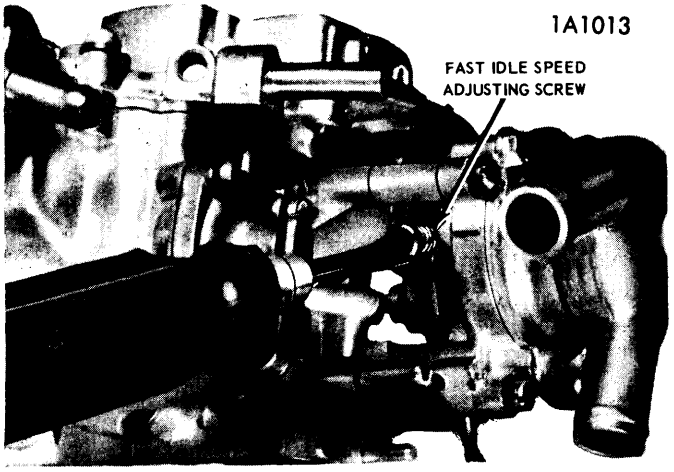
► *ROUGH IDLE NOTE* – Check for loose carburetor to intake manifold nuts. If nuts are loose, replace the gasket before tightening.

► *ROUGH IDLE NOTE* – Check for broken solenoid bracket, mounting stud, or boss. Correct any discrepancy by installing revised parts D1FZ-9J586D, D1FZ-9J9599A and D2FZ-9J586A.

► *ROUGH IDLE NOTE* – Rough idle may be due to a loose idle jet retainer, or loose fuel inlet needle seats. Correct by torquing jet retainer to 10-15 IN. LBS., and by torquing fuel inlet needle seats to 15-30 IN. LBS.

ADJUSTMENT

►*NOTE – Do not attempt to adjust or tamper with idle mixture screws locked in position with plastic limiter caps. If limiter caps and idle mixture screws are removed for carburetor overhaul, fuel bowl or throttle body replacement, special procedure is required to correctly readjust idle mixture screws.*

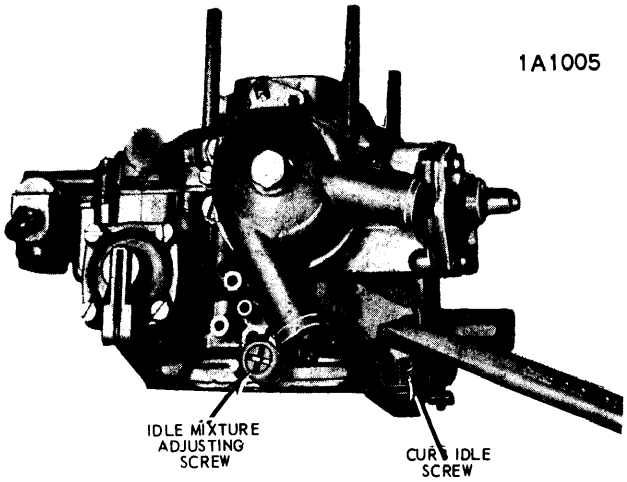


FAST IDLE SPEED ADJUSTMENT

IDLE SPEED & MIXTURE (1971)

Without A/C – Adjust curb idle RPM to specifications. This adjustment must be made with air cleaner installed.Turn idle mixture adjusting screw inward to obtain smoothest idle possible within range of limiter cap. Readjust idle RPM if necessary.

With A/C – Adjust idle RPM to specifications by turning adjusting nut on bottom of throttle solenoid. Disconnect solenoid wire and adjust curb idle adjusting screw until specified RPM is obtained. Reconnect solenoid wire and open throttle slightly to allow solenoid plunger to extend. Recheck final idle RPM. Disconnect tachometer and adjust mixture screw until smoothest possible idle is obtained.



IDLE ADJUSTMENTS

IDLE SPEED & MIXTURE (1972)

With engine at operating temperature and all other tune-up specifications correct, adjust curb idle as follows; with automatic transmission in "D". Disconnect throttle solenoid wire and set the lower curb idle using the curb idle adjusting screw. Reconnect throttle solenoid wire and open throttle slowly by hand to allow plunger to extend, then set higher idle speed by turning solenoid plunger. Turn idle mixture screw inward to obtain smoothest idle.

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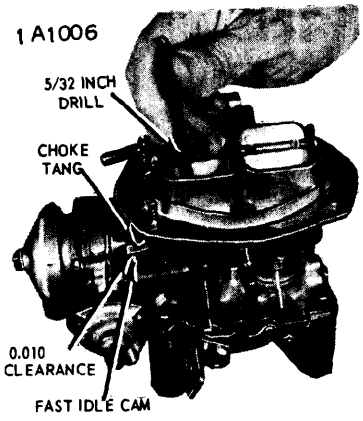
Fast Idle Cam Clearance

Insert a 5/32" drill between the lower edge of the choke plate and air horn wall. With fast idle screw held on the second step of the fast idle cam, measure the distance between the tang of the choke lever and the arm on the fast idle cam. Clearance should be as shown in Specification Table. If clearance is not correct, bend tang on choke lever to adjust.



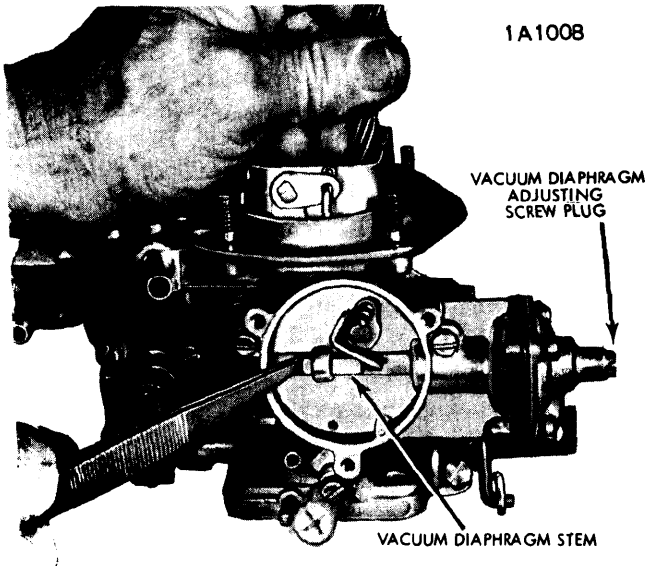
FAST IDLE CAM CLEARANCE

Fast Idle Speed

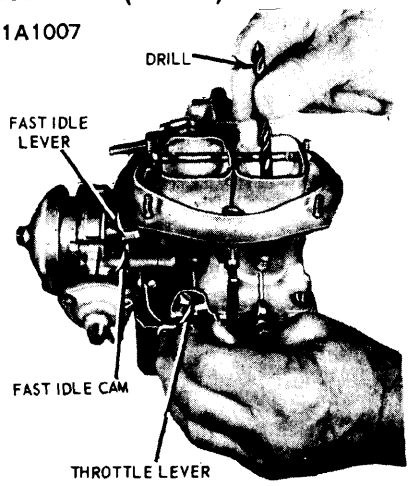
With engine at operating temperature, position the fast idle screw on the second step (and against the shoulder of the first step) of the fast idle cam. Adjust fast idle screw (see illustration) to obtain speed shown in Specification Table.

Choke Plate Pull-Down

After removing the choke thermostatic spring cover assembly (do not remove the water cover screw), push the diaphragm stem back against its stop. Remove any slack in the choke linkage by applying finger pressure to the top edge of the choke plate. Measure clearance between lower edge of choke valve and wall of air horn, using a drill or gauge rod of the specified diameter. If clearance not correct remove plug from diaphragm (see illustration) and turn adjusting screw as required.



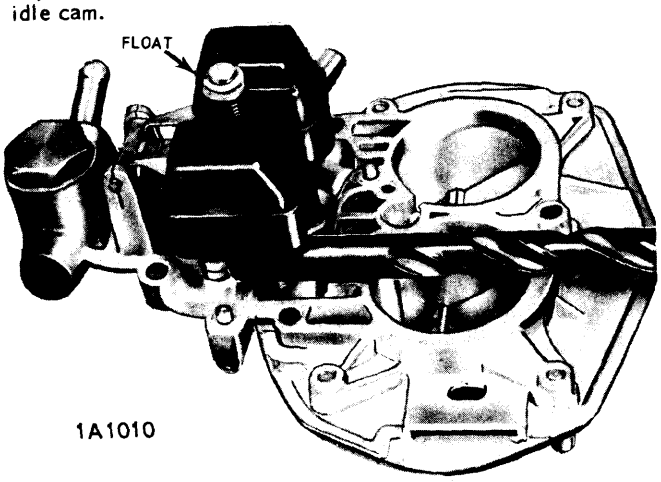
ADJUSTING CHOKE PULL-DOWN



CHOKE UNLOADER ADJUSTMENT

Choke Unloader

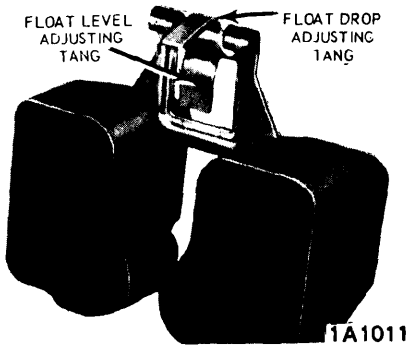
Hold throttle lever in wide open position. Take all slack out of choke linkage by applying pressure to top edge of choke plate. Measure clearance between lower edge of choke plate and air horn wall (see Specifications). To adjust, bend tab on fast idle lever where it touches fast idle cam.



FLOAT LEVEL MEASUREMENT

Dry Float Setting

Hold carburetor bowl cover in an inverted position with float tang resting on needle of needle valve. Measure clearance between edge of float and bowl cover (see illustration). Adjust to specification by bending float tang up or down.



FLOAT ADJUSTMENT TANGS

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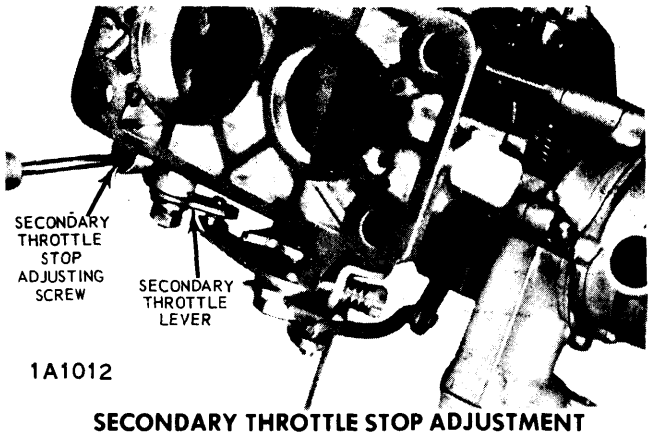
Secondary Throttle Stop Screw

Back off secondary throttle stop screw (see illustration) until secondary throttle plate seats in its bore. Next, turn screw in until it touches the tab on the secondary throttle lever, then turn screw in an additional ¼ turn.

Automatic Choke

Choke cover can be rotated slightly after loosening three screws (not necessary to loosen or remove water cover). Adjust choke cover to specifications and tighten retaining screws.



SECONDARY THROTTLE STOP ADJUSTMENT

CARBURETOR ADJUSTMENT SPECIFICATIONS

Ford Carb. Number	Idle Speed (Engine RPM)		Fast Idle Cam③ Setting	Accel. Pump Setting	Float Level② Setting	Choke Pull-Down Setting	Unloader Setting	Auto. Choke Setting
	Hot①	Fast						
D12F-AA	650	1800	.020"	Lower Hole	.420"	.236"	.256"	Index
D12F-BA	750	1600	.020"	Lower Hole	.420"	.236"	.256"	Index
D12F-CA	650/500	1800	.020"	Lower Hole	.420"	.236"	.256"	Index
D12F-DA	650	1800	.020"	Lower Hole	.420"	.236"	.256"	1-Rich
D12F-EA	750	1600	.020"	Lower Hole	.420"	.236"	.256"	1-Rich
D12F-FA	650/500	1800	.020"	Lower Hole	.420"	.236"	.256"	1-Rich
D22F-AA	650	1800	.....	#2 Hole	.420"	.236"	.256"	1-Lean
D22F-AB	650/500	1800	.156"	#3 Hole	.420"	.236"	.256"	1-Lean
D22F-AC	.....	.....	.156"	#3 Hole	.420"	.236"	.256"	1-Lean
D22F-BA	750	1600	.....	#2 Hole	.420"	.236"	.256"	1-Lean
D22F-BB	750/500	1600	.079"	#2 Hole	.420"	.236"	.256"	1-Lean
D22F-BC	.....	.....	.079"	#2 Hole	.420"	.236"	.256"	1-Lean
D22F-CA	650/475	1800	.....	#2 Hole	.420"	.236"	.256"	1-Lean
D22F-CB	650/500	1800	.156"	#3 Hole	.420"	.236"	.256"	1-Lean
D22F-DA	750/475	1600	.....	#2 Hole	.420"	.236"	.256"	1-Lean
D22F-DB	750/500	1600	.079"	#2 Hole	.420"	.236"	.256"	1-Lean
D22F-EA	750/500	1600	.156"	#2 Hole	.420"	.236"	.256"	1-Lean
D22F-EB	.....	.....	.156"	#3 Hole	.420"	.236"	.256"	Index
D22F-GA	650/500	1800	.156"	#3 Hole	.420"	.236"	.256"	Index

① – Higher RPM, solenoid energized, Auto. Trans. in Drive.
Lower RPM, solenoid de-energized, Transmission in Neutral.
② – Dry setting, ± 1/32".
③ – ± .020".

OVERHAUL

Disassembly

1) Remove fuel inlet filter plug and screen assembly. Remove bowl cover screws and lockwasher, then remove retaining clips from choke rod and carefully remove bowl cover. Remove choke rod seal plug and seal. Remove float shaft, float, and inlet needle, then remove the three vacuum diaphragm screws, washers and diaphragm.

2) Remove choke water housing screws and washer. Remove water cover and gasket. Remove three choke thermostatic spring housing retaining screws, then remove ring, choke thermostatic spring housing and gasket. Remove choke housing assembly screws (3), slip housing away from main body and disengage fast idle rod, **note location of the long screw.** Remove O-ring from vacuum passage, then remove choke shaft nut and lock washer. **Note position of fast idle cam spring.**

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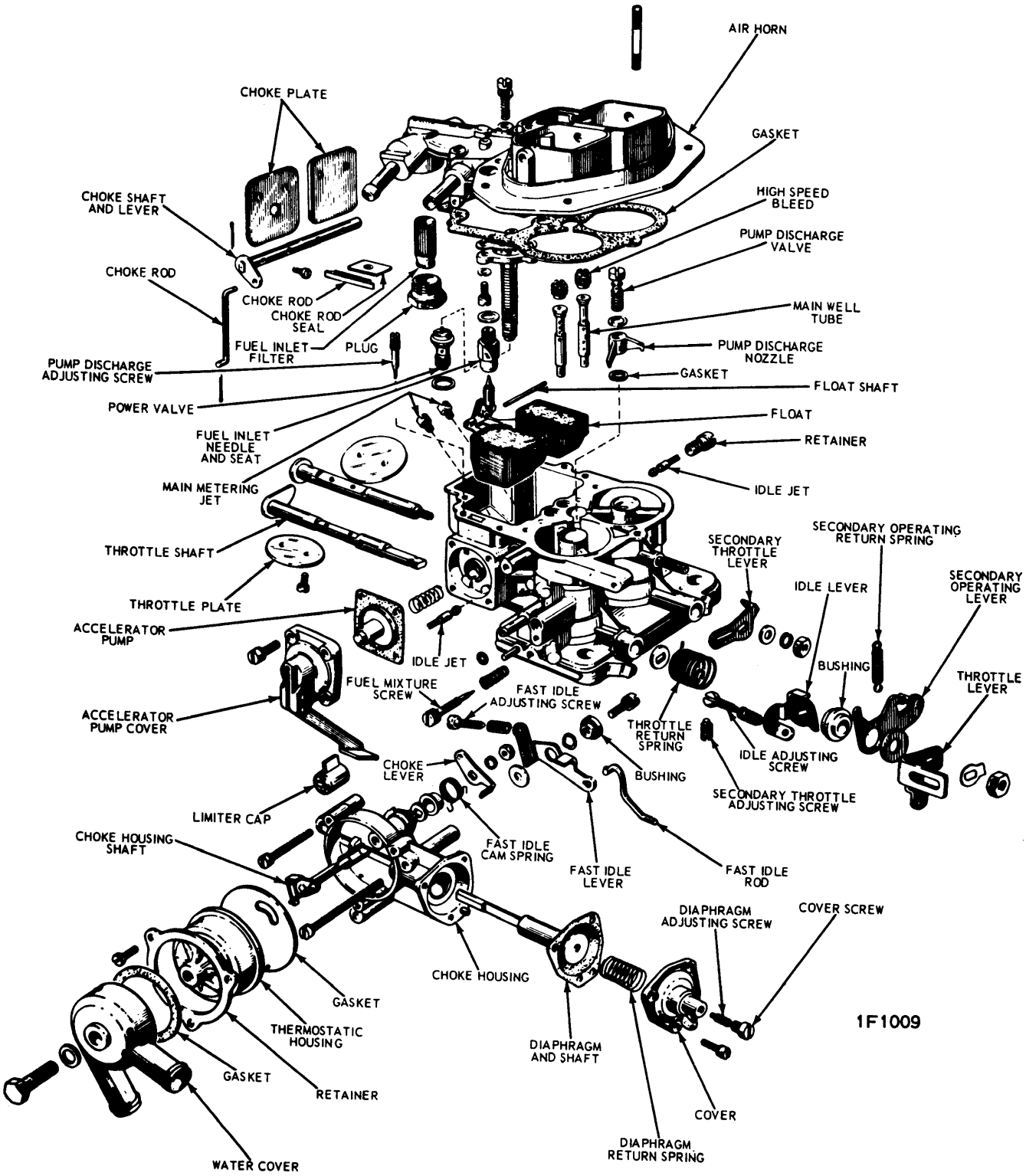

HOLLEY (FORD) 5200 CARBURETOR ASSEMBLY

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3) Remove the spring loop from choke lever, then remove choke lever and spring, and spring retainer. Remove choke shaft washer, choke shaft, lever, and Teflon bearing. Remove fast idle lever and shaft retaining screw, bushing and spring washer. Remove fast idle lever, flat spacer, and adjusting screw and spring. Remove choke diaphragm cover screws (3) and cover assembly. Remove return spring, diaphragm and rod assembly, diaphragm plug and diaphragm adjusting screw, from cover.

4) Remove pump cover screws (4) and pump cover assembly, then remove pump diaphragm assembly and return spring. Remove pump discharge valve assembly and discharge valve assembly and discharge nozzle with two gaskets, then remove the pump channel plug screw.

5) Remove primary well air bleed plug and main well tube, remove secondary main well air bleed plug and main well tube. Note size of air bleed plugs and main well tubes for reinstallation in their proper locations. Remove primary and secondary main metering jets, noting their size for proper reinstallation. Remove power valve and gasket, remove primary and secondary idle jet retainer plugs and idle jets located on the sides of the carburetor body.

6) Turn idle limiter cap in to the stop, remove cap, then count number of turns required to lightly seat idle adjustment needle (count to nearest 1/16 turn), so that needle may be reinstalled at the same location, then remove idle needle and spring.

7) Remove secondary operating lever return spring, then remove primary throttle lever nut and lock washer. Remove primary lever and flat washer, secondary operating lever assembly and lever bushing. Remove idle adjusting lever spring and shaft washer, noting how primary throttle return spring is hooked over idle adjusting lever and carburetor body. Remove idle speed screw and spring from idle adjusting lever, then remove secondary throttle lever nut, lock washer, flat washer and secondary throttle lever, and adjusting screw.

Cleaning & Inspection

Inspect all parts for damage or wear, replace as necessary. Clean all parts in a suitable solution.

Reassembly

Use all new gaskets and reverse disassembly procedures.